

CLAIMS

What is claimed is:

1. A symmetrical, hand-held trackball pointing device for use by right-handed and left-handed users, comprising:
- a) a housing adapted and configured to fit into a users hand proximate the metacarpal (i.e., first phalangeal) region of the fingers thereof;
  - b) a trackball element disposed in said housing and adapted and configured for interaction with the thumb of said hand of said user, and adapted for generating a trackball signal representative of a position thereof;
  - c) at least one switch disposed in said housing and adapted for manipulative interaction with said metacarpal region of a finger of said hand of said user, said at least one switch

17 producing a switch signal representative of  
18 the state of said at least one switch;

19 d) circuitry disposed within said housing and  
20 operatively connected to said track ball  
21 element and said at least one switch and  
22 adapted to receive at least said trackball  
23 signal and said switch signal and generate an  
24 output signal representative of at least one  
25 of said trackball signal and said switch  
26 signal;

27 e) means for communicating operatively connected  
28 to said circuitry and adapted to communicate  
29 said output signal to an external device.

1 2. The symmetrical, hand-held pointing device, as  
2 recited in claim 1, wherein said at least one switch  
3 comprises three switches adapted and configured for  
4 switchable interaction with said metacarpal region of  
5 three adjacent fingers of said hand of said user.

1           3. The symmetrical, hand-held pointing device, as  
2 recited in claim 2, wherein said three switches  
3 comprise momentary push button switches.

1           4. The symmetrical, hand-held pointing device, as  
2 recited in claim 1, wherein said means for  
3 communicating comprises a hard-wired connection to said  
4 external device.

1           5. The symmetrical, hand-held pointing device, as  
2 recited in claim 1, wherein said means for  
3 communicating comprises a wireless transmitter disposed  
4 in said housing and adapted for transmitting said  
5 output signal to a receiver operatively connected to  
6 said external device.

1           6. The symmetrical, hand-held pointing device, as  
2 recited in claim 5, wherein said wireless transmitter  
3 comprises a radio frequency (RF) transmitter and said  
4 receiver comprises an RF receiver adapted for reception  
5 of said output signal transmitted by said transmitter.

1           7. The symmetrical, hand-held pointing device, as  
2 recited in claim 5, wherein said wireless transmitter  
3 comprises a infrared (IR) transmitter and said receiver  
4 comprises an IR receiver compatible therewith.

1           8. The symmetrical, hand-held pointing device, as  
2 recited in claim 1, wherein said housing comprises a  
3 pistol grip region and said at least one switch is  
4 disposed proximate said pistol grip region.

1           9. The symmetrical, hand-held pointing device, as  
2 recited in claim 8, further comprising:

3           f) means for securing said hand-held pointing  
4 device to said hand of said user.

1           10. The hand-held pointing device, as recited in  
2 claim 9, wherein said means for securing said hand-held  
3 pointing device to said hand of said user comprises at  
4 least one elastic band.

1           11. The symmetrical, hand-held pointing device,  
2 as recited in claim 9, wherein said means for securing

3 said hand-held pointing device to said hand of said  
4 user comprises at least one strap comprising hook and  
5 loop fastening means.

1 12. The symmetrical, hand-held pointing device,  
2 as recited in claim 1, wherein said housing comprises a  
3 symmetrical housing adapted for use in either the right  
4 or left hand of a user.